

ABSTRACT

A blank for disc is heat treated for adjusting a surface hardness thereof to not less than Hv700. The blank has a spline hole thereof heated by high frequency heating while cooling a race thereof. Subsequently, the spline hole is subjected to slow cooling. Thus is obtained a disc having a surface hardness of not less than Hv700 at the race, and a surface hardness of not more than Hv600 at the spline hole, the disc wherein at least a thin portion is varied in hardness between a hardened layer of a bottom of the spline hole and a hardened layer of the race by an amount of not less than Hv20 per 1-mm depth.